

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF INDUSTRIAL ACCIDENTS**

**TREATMENT GUIDELINES
EFFECTIVE JULY 1, 1993**

**GUIDELINE NUMBER 5 - THORACIC OUTLET SYNDROME
NEUROGENIC ORIGIN**

I. Conservative Care :

- A. 3 months of conservative treatment; **and**
- B. A second surgical opinion from a non-surgical specialist (e.g., neurologist, physiatrist, or rheumatologist)

AND

II. Clinical Findings :

- A. Subjective - in the affected upper extremities:
 - 1. Pain; **and**
 - 2. Numbness or paresthesias in the ulnar nerve distribution; **and**
 - 3. At least two of the following tests must exactly reproduce symptoms of pain with or without pulse obliteration (in the affected upper extremity):
 - a. Roos' maneuver
 - b. Adson's maneuver
 - c. Costoclavicular maneuver
 - d. Hyperabduction maneuver

AND

- B. Objective - in the affected upper extremity:
 - 1. Positive doppler ultrasonography; **or**
 - 2. Positive nerve conduction, EMG or somatosensory evoked potential studies

OR

- C. Imaging
 - 1. X-ray studies that confirm the presence of cervical ribs, elongated C-7 process, hypoplastic first rib or fractured clavicle.

III. Special Instructions :

- A. *A psychiatric or psychological evaluation may be required on a case-specific basis.*